

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION I**

IN THE MATTER OF )	DOCKET NO. CWA-01-15-010
)	
Pan Am Railways, Inc., Boston and )	FINDINGS OF VIOLATION
Maine Corporation, Springfield Terminal )	
Railway Company, Inc., and Maine Central )	AND
Railroad Company, Inc. )	
)	
Proceedings under Sections 308(a) )	ORDER FOR COMPLIANCE
and 309(a)(3) of the Clean Water Act, )	ON CONSENT
<u>as amended, 33 U.S.C. Section 1319(a)(3)</u> )	

**I. STATUTORY AUTHORITY**

The following FINDINGS are made and ORDER ON CONSENT issued pursuant to Sections 308(a) and 309(a)(3) of the Clean Water Act, as amended (the "Act"), 33 U.S.C. §§ 1318 and 1319(a)(3). Section 308(a) of the Act authorizes EPA to require the submission of any information required to carry out the objectives of the Act. Section 309(a)(3) of the Act grants to the Administrator of the U.S. Environmental Protection Agency ("EPA") the authority to issue orders requiring persons to comply with Sections 301, 302, 306, 307, 308, 318 and 405 of the Act and any permit condition or limitation implementing any of such sections in a National Pollutant Discharge Elimination System ("NPDES") permit issued under Section 402 of the Act, 33 U.S.C. § 1342. These authorities have been delegated to EPA Region I's Regional Administrator and, in turn, to the Director of EPA, Region I's Office of Environmental Stewardship (the "Director").

The Order herein is based on findings of violation of Section 301 of the Act, 33 U.S.C. § 1311, and the conditions of NPDES Permit No. MA0000272 and NPDES Permit No. ME0036803. Pursuant to Section 309(a)(5)(A) of the Act, 33 U.S.C. § 1319(a)(5)(A), the Order provides a schedule for compliance which the Director has determined to be reasonable.

## II. BACKGROUND/DEFINITIONS

Unless otherwise defined herein, terms used in this Order shall have the meaning given to those terms in the Clean Water Act, 33 U.S.C. § 1251 et. seq., the regulations promulgated thereunder, and any applicable NPDES permits.

## III. FINDINGS

### **East Deerfield, Massachusetts Facility**

The Director makes the following findings of fact with respect to the East Deerfield, Massachusetts facility:

1. Pan Am Railways, Inc. is a company organized under the laws of the state of Delaware with its principal place of business in Billerica, Massachusetts.
2. Boston and Maine Corporation is a company organized under the laws of the state of Delaware with its principal place of business in Billerica, Massachusetts.
3. Boston and Maine Corporation is a subsidiary of Pan Am Railways, Inc.
4. Each company is a “person” within the meaning of Section 502(5) of the CWA, 33 U.S.C. § 1362(5).
5. The companies owned and/or operate through an affiliate railroad terminal at 38 Railroad Yard Road in East Deerfield, Massachusetts (the “East Deerfield Facility”).
6. At the East Deerfield Facility locomotives are fueled and locomotives and boxcars are serviced, repaired, maintained, and cleaned.
7. On September 23, 2005, EPA and the Massachusetts Department of Environmental Protection (“MassDEP”) issued an NPDES permit MA0000272 to Boston and Maine Corporation (“2005 NPDES Permit”). The 2005 NPDES Permit was modified on August

11, 2006 and expired<sup>1</sup>, as amended, on November 22, 2010.

8. EPA and MassDEP reissued the permit on March 26, 2013 (“2013 NPDES Permit”).

9. The 2005 and 2013 NPDES Permits authorize Boston and Maine to discharge stormwater from six outfalls with serial numbers 001, 002, 003, 004, 005, and 006, subject to the conditions in the 2005 and 2013 NPDES Permits.

10. Outfalls referred to as numbers 001, 002, 003, 004, 005 and 006 in the 2005 and 2013 NPDES Permits for the East Deerfield Facility discharge into wetlands or unnamed streams that flow into the Connecticut River.

11. Outfall numbers 001, 002, 003, 004, 005 and 006 are “point source[s]” within the meaning of Section 502(14) of the CWA, 33 U.S.C. § 1362(14).

12. The discharges from outfall numbers 001, 002, 003, 004 005 and 006 contain chemical wastes, biological materials, rock, sand, and industrial waste which are “pollutant[s]” within the meaning of section 502(6) of the CWA, 33 U.S.C. § 1362(6).

13. The wetlands and unnamed streams described above, and the Connecticut River and the Long Island Sound into which it flows are “waters of the United States,” as defined in 40 C.F.R. § 122.2, and, thereby, “navigable waters,” as defined in Section 502(7) of the CWA, 33 U.S.C. § 1362(7).

14. On September 23, 2013, an authorized representative of EPA visited the East Deerfield Facility to review compliance with Federal and State environmental laws and

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<sup>1</sup> Because Respondent timely submitted a reapplication for its NPDES permit, the permit was administratively extended until issuance of the 2013 NPDES Permit.

regulations, including compliance with the CWA (the “Inspection”).

15. The companies did not conduct annual site inspections as required by the SWPPP for 2011 or 2012 in violation of Part I.B.5.c. of the 2005 NPDES Permit and Section 301(a) of the CWA, 33 U.S.C. § 1311(a).

16. The companies did not complete an updated SWPPP or submit the updated SWPPP and SWPPP certification to EPA and MassDEP within 90 days after the effective date of the permit in violation of Part I.C.2 of the 2013 NPDES Permit and Section 301(a) of the CWA, 33 U.S.C. § 1311(a).

17. The companies failed to fully implement BMPs, including erosion and sediment controls, in violation of Part I.C.4. of the 2013 NPDES Permit, and Section 301(a) of the CWA, 33 U.S.C. § 1311(a) from at least September 23, 2013 through August 6, 2014.

#### **Waterville, Maine Facility**

The Director makes the following findings of fact with respect to the Waterville, Maine facility:

18. Pan Am Railways, Inc. is a company organized under the laws of the state of Delaware with its principal place of business in Billerica, Massachusetts.

19. Springfield Terminal Railway Company, Inc. is a company organized under the laws of the state of Vermont with its principal place of business in Billerica, Massachusetts.

20. Maine Central Railroad Company is a company organized under the laws of the state of Maine with its principal place of business in Billerica, Massachusetts.

21. Springfield Terminal Railway Company, Inc. and Maine Central Railroad Company are subsidiaries of Pan Am Railways, Inc.

22. Each company is a “person” within the meaning of Section 502(5) of the CWA, In the Matter of City of Pan Am Railways, Inc., *et al.*  
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33 U.S.C. § 1362(5).

23. The companies own and/or operate a railroad terminal at 55 College Avenue in Waterville, Maine (the “Waterville Facility”).

24. At the Waterville Facility, locomotives are fueled and locomotives and boxcars are serviced, repaired, maintained, cleaned, and painted. In addition, motor vehicles and track maintenance equipment are serviced and repaired at the Facility.

25. On April 4, 2006, the Maine Department of Environmental Protection (“MEDEP”) issued Waste Discharge License (“WDL”) #W006634-50-D-R/MEPDES Permit #ME0036803 to MCRR for a five year term (“2006 MEPDES Permit”). The 2006 MEPDES Permit expired<sup>2</sup>, but was re-issued to Springfield Terminal Railways/MCRR on June 8, 2011 (WDL #W006634-50-E-R/MPDES Permit #ME0036803 (“2011 MEPDES Permit”))

26. The 2006 and 2011 MEPDES Permits authorize Springfield Terminal Railways/MCRR to discharge process water and stormwater from outfall 003A, subject to the conditions in the 2006 and 2011 MEPDES Permits.

27. Pan Am submitted a Notice of Intent for coverage for the Facility under the MEMSGP on May 5, 2011.

28. MEDEP provided acknowledgement to Pan Am on August 29, 2011 indicating that the active date of 2011 MEMSPG Permit coverage for the Facility was April 26, 2011.

29. Outfalls referred to as numbers 001, 002, 003, 003A, 004, 005 and 006 in Respondents’ Stormwater Pollution Prevention Plan (“SWPPP”) for the Facility discharge into

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<sup>2</sup> Because Springfield Terminal Railways timely submitted a reapplication for the 2006 MEPDES Permit, the 2006 MEPDES Permit was administratively extended until issuance of the 2011 MEPDES Permit.  
In the Matter of City of Pan Am Railways, Inc., *et al.*  
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into the Kennebec River.

30. Outfall numbers 001, 002, 003, 003A, 004, 005 and 006 are “point source[s]” within the meaning of Section 502(14) of the CWA, 33 U.S.C. § 1362(14).

31. The discharges from outfall numbers 001, 002, 003, 003A, 004, 005 and 006 contain chemical wastes, biological materials, rock, sand, and industrial waste which are “pollutant[s]” within the meaning of section 502(6) of the CWA, 33 U.S.C. § 1362(6).

32. The Kennebec River is a “water[] of the United States,” as defined in 40 C.F.R. § 122.2, and is a “navigable water[,]” as defined in Section 502(7) of the CWA, 33 U.S.C. § 1362(7).

33. On July 14, 2011, March 26, 2013, December 12, 2013, and April 22, 2014, authorized representatives of EPA visited the Waterville Facility to review compliance with Federal and State environmental laws and regulations, including compliance with the CWA (the “Inspections”).

34. The companies did not fully describe all control measures (including BMPs) in the Waterville Facility’s SWPPP in violation of Part V.B of the 2011 MEMSGP and Section 301(a) of the CWA, 33 U.S.C. § 1311(a).

35. The companies failed to perform good housekeeping procedures in violation of Part V.C.2 of the 2011 MEMSPG and Section 301(a) of the CWA, 33 U.S.C. § 1311(a) from at least March 26, 2013 through August 7, 2014.

36. The companies failed to maintain and repair industrial equipment, systems and BMPs to prevent situations that may result in leaks, spills or other releases of pollutants in

violation of Part V.C.3. of the 2011 MEMSGP and Section 301(a) of the CWA, 33 U.S.C. from at least March 26, 2013 through August 7, 2014.

#### IV. ORDER

Accordingly, pursuant to Sections 308 and 309(a)(3) of the Act, it is hereby ordered that:

1. Springfield Terminal Railway Company shall implement the Environmental Culture Assessment (“ECA”) included as **Attachment 1**, including any action plans developed under the ECA. Springfield Terminal Railway Company shall incorporate implementation of the ECA and any associated action plans as part of its SWPPPs for each of its New England facilities requiring a SWPPP (or its equivalent under state requirements). The action plans will outline milestones and establish timelines for implementation of key actions.
2. **Deadlines** -- Springfield Terminal Railway Company shall meet the following deadlines:
  - a. Complete Phase 1 of the ECA within one year of the effective date of this Order;
  - b. Complete Phases 2 and 3 of the ECA within two years of the effective date of this Order;
  - c. Provide copies of the action plans developed under Phase 3 “Action Plan Development” of the ECA to EPA within 30 days of completion of such action plans;
  - d. Provide biannual reports to EPA as described in Section IV.6 of this Order.
3. **Applicability** -- The ECA shall apply to the following Pan Am Railways, Inc. facilities:
  - a. 38 Railroad Yard Road in East Deerfield, Massachusetts
  - b. 1 Upper Rail Yard, Ayer, Massachusetts
  - c. 1700 Iron Horse Park, North Billerica, Massachusetts
  - d. 55 College Avenue in Waterville, Maine
  - e. 38 Rigby Road, South Portland, Maine
4. **Penalties for failure to fully implement the Culture Assessment and action plan** --For failing to meet the deadlines described in Section IV.2 of this Order, Springfield

Terminal Railway Company agrees to execute a consent agreement and final order which would require it to pay the following for violations of the Clean Water Act:

Penalty per violation

<u>Period of Failure to Comply</u>	<u>per day per violaton</u>
1st through 30th day	\$ 500
31st through 60th day	\$ 1,000
61st day and beyond	\$ 1,500

5. **Form of Penalty Payment** – Upon any missed deadlines as submitted by Springfield Terminal Railway Company pursuant to Section IV.2 of this Order, EPA may present to Springfield Terminal Railway Company a consent agreement and final order proposing to assess such penalties for such missed deadlines consistent with “Penalty per violation” table in Section IV.4. of this Order. Springfield Railway Terminal Company agrees to sign and return such consent agreement and final order to EPA and pay the proposed penalties subject to the consent agreement and final order being made effective consistent with the requirements of Section 309(g) of the CWA, 33 U.S.C. § 1319(g), and 40 C.F.R. Part 22.
6. **Reporting Requirements** – Springfield Terminal Railway Company shall submit bi-annual progress reports to EPA summarizing its compliance with the provisions of this Order. Each progress report submitted pursuant to this paragraph shall:
  - a. describe activities undertaken during the reporting period directed at achieving compliance with this Order and costs incurred to date;
  - b. describe the expected activities to be taken during the next reporting period in order to achieve compliance with this Order included projected costs;
  - c. describe any missed deadlines as required by the ECA and associated action plans or key action items required to be completed under such plans, or other requirements of the Order, and the duration of such non-compliance, and
  - d. identify any anticipated or potential areas of noncompliance with this Order.



- e. Such reports will be due by January 1st and July 1st of each year beginning January 1, 2016 and continuing through January 1, 2019.

## **V. NOTIFICATION PROCEDURES**

1. Where this Order requires a specific action to be performed within a certain time frame, Springfield Terminal Railway Company shall submit a written notice of compliance or noncompliance with each deadline. Notification shall be mailed within 14 days after each required deadline. The timely submission of a required report shall satisfy the requirement that a notice of compliance be submitted.
2. If noncompliance is reported, notification should include the following information:
  - a. A description of the noncompliance;
  - b. A description of any actions taken or proposed by Springfield Terminal Railway Company to comply with the lapsed schedule requirements;
  - c. A description of any factors that explain or mitigate the noncompliance; and
  - d. An approximate date by which Springfield Terminal Railway Company will perform the required action.
3. After a notification of noncompliance has been filed, compliance with the past-due requirement shall be reported by submitting all required documents or providing EPA with a written report indicating that the required action has been achieved. Submissions required by this Order shall be in writing and shall be mailed to the following address:

U.S. Environmental Protection Agency  
Region I  
5 Post Office Square, Suite 100  
Mail code OES(04-4)  
Boston, MA 02109-3912  
Attn: Alex Rosenberg

A copy of each mailed item shall also be emailed to Mr. Rosenberg at [Rosenberg.alex@epa.gov](mailto:Rosenberg.alex@epa.gov), concurrent with mailing.

## **VI. GENERAL PROVISIONS**

1. This Order does not constitute a waiver or a modification of the terms and conditions of any permits described in this Order. The permits remains in full force and effect. EPA reserves the right to seek any and all remedies available under Section 309 of the Act, 33 U.S.C. § 1319, as amended, for any violation cited in this Order.
2. The companies named in this Order waive any and all claims for relief and otherwise available rights or remedies to judicial or administrative review which they may have with respect to any issue of fact or law set forth in this Order, including, but not limited to, any right of judicial review of the Section 309(a)(3) Compliance Order on Consent under the Administrative Procedure Act, 5 U.S.C. §§ 701-708.
3. This Order shall become effective upon signature by both parties.

4. The undersigned representative of the companies and the EPA certifies that he or she is fully authorized to enter into the terms and conditions of this Order and to execute and legally bind the entity he or she represents to this document.

<u>07/17/15</u> Date	<u>Susan Studlien</u> Susan Studlien, Director Office of Environmental Stewardship Environmental Protection Agency, Region I
<u>7/13/15</u> Date	<u>Cynthia S. Scarano</u> Cynthia S. Scarano Executive Vice President Pan Am Railways, Inc. (on behalf of all companies in this Order)

Pan Am is proposing to work with ERM Consulting and Engineering, Inc. (ERM) to perform an Environmental Culture Assessment (ECA) to determine the maturity level of the current environmental culture present at both the corporate and yard level. Once the current environmental culture maturity level is determined through the use of the ECA, Pan Am will use the results of the assessment to develop and implement specific action plans to improve the current environmental culture and, thus, to mitigate the impact of rail operations on the environment. This multi-phase process is summarized below.

### **Phase 1 - Project Setup**

The first phase of this ECA project will be to develop Pan Am-specific Environmental aspects, as related to both people and systems. People-related aspects focus on the “soft” side of an environmental culture; system-related aspects focus more on the documentation side of an environmental culture at an organization. The specific people and system-related aspects will be developed internally by Pan Am to ensure that the behaviors and cultural aspects most critical to environmental protection and compliance will be addressed. By customizing the aspects, this allows Pan Am to develop an assessment process that meets the needs of and focuses on the areas where they see the need for the most improvement. Examples of aspects used historically include:

1. People-related aspects
  - a. Belief – A measure of employees’ belief that there can be zero environmental incidents/releases at Pan Am.
  - b. Leadership Commitment – A measure of the involvement of senior leadership at Pan Am, both at the Corporate and Yard level.
  - c. Communication – A measure of how effective communication is at the organization about environmental issues.
2. System-related aspects
  - a. Operational Controls – A measure of the documentation present at the organization and its usability/compliance and employees’ understanding of the documentation.
  - b. Incident Investigation – A review of the spill/incident investigation process and its effectiveness. For example, whether incidents are reported and closed appropriately.
  - c. Training – A measure of the effectiveness of the training program to determine if those individuals that are receiving training are receiving the proper training based on their responsibilities and have an understanding of the information received and how to apply it to their day-to-day jobs.

Next, the ECA will determine Pan Am-specific maturity levels for the previously identified people and systems-related culture aspects. A ranking system will be developed using a progression from one to five, with one representing an initial or basic maturity level and five representing the ideal or optimized environmental culture. These levels will be developed for each of the identified people and system-related aspects.



1. Examples of maturity levels for people-related environmental culture aspects may include the following:
  - a. Initial (1) - This level represents a weak and instable environmental culture.
  - b. Reactive (2) - This level represents an environmental culture that builds on reactions in case something goes wrong while ignoring broader issues.
  - c. Calculative (3) - This level represents an environmental culture that is built on a tactical approach toward safety.
  - d. Individual values (4) - This level represents an environmental culture driven by strong individuals who take pro-active leadership roles.
  - e. Shared values (5) - This level represents a vital and stable environmental culture fundamental to the business.
2. Examples of maturity levels for systems-related culture aspects may include the following:
  - a. Initial (1) - This level represents a system in which no proven processes are in place.
  - b. Managed (2) - This level represents a system in which basic environmental management practices are in place.
  - c. Defined (3) - This level represents a system in which environmental processes are well characterized, understood and described in Standard Operating Procedures (SOPs).
  - d. Quantitatively Managed (4) - This level represents a system in which environmental objectives are set and performance is measured regularly. Results serve as criteria to improve environmental performance.
  - e. Optimizing (5) - This level represents a system in which environmental performance and processes are included in the overall, continuous improvement process.

Based on customized environmental culture aspects and maturity levels developed during the project setup phase, ERM and Pan Am will create a Pan Am-specific ECA process to incorporate feedback from staff at all levels and in all roles. Moreover, we will determine the proper personnel to reach out to as well as which yards to use as part of the assessment process.

### **Phase 2 - Analysis (Assessment)**

Based upon the process developed in Phase 1, ERM and Pan Am will conduct an environmental culture assessment specific to the Pan Am system, which will include the following:



1. Practical workplace observations at the identified Pan Am locations. This step will target all facilities where Pan Am has active operations such as repair facilities and classification yards. These facilities include Deerfield, Ayer, and Billerica, Massachusetts, and Portland, and Waterville, Maine;
2. Facilitate discussion sessions to targeted groups of Pan Am management and employees from all career levels across the system. Discussion sessions will be held in multiple locations across the system in order to access the highest number of employees in a variety of roles; and
3. Carry out personal interviews with pre-specified individuals in more senior roles within the organization. This step will include interviews with personnel in environmental roles as well as managers from other departments in order to gauge the level of engagement of management in environmental issues.

After the assessment process, ERM will draft a report with findings and recommendations from the environmental culture assessment. As part of the assessment process, data presented will include both the results of Pan Am employee survey results as well as ERM survey results.

### **Phase 3 - Action Plan Development**

Action plans are the opportunity to take the results of the ECA and implement change to the current environmental culture. Pan Am will define which individuals will be involved in Phase 3, what action plans should be developed, and which parties will be working on which specific action items. It is important to note that ownership and responsibility for completion of action items should not rely solely on the environmental department; buy-in and involvement from all portions of the organization, such as management, safety, and engineering personnel, is essential for the success of the action plans. The steps in Phase 3 will include:

1. Development of action plans based upon the results of the culture assessment and ongoing initiatives at Pan Am. Actions will be developed using input from Pan Am as well as ERM. The action plan will outline milestones and establish a timeline for implementation of key actions.
2. An environmental action workshop will be held, with oversight from ERM, to establish responsible parties, deliverables/key performance indicators/metrics, resources needed, start dates, and deadlines for the action steps identified. Responsibility for each action will be assigned to a Pan Am employee to oversee implementation. Ideally, responsibility for actions will be distributed across the system to facilitate cooperation across geographic area and roles.

### **Phase 4 - Implementation of Action Plans**

In the Implementation phase, Pan Am will begin to implement the action plans developed in Phase 3. Progress will be measured against key “gateways” or certain timeline points established in Phase 3 for status checks. To ensure progress is made, teams of Pan Am personnel will be established and assigned responsibility for implementation of each of the action items. As mentioned previously, responsibility for implementation of the actions will be distributed across all levels and across the geography of the

system. Each of the action plan teams will report to senior management on a regular basis with the current status of the project. The teams will:

1. Work to complete all necessary changes and will carry out further actions, as needed.
2. Document the action plan and conduct transition planning, as needed, should ongoing action be required to satisfactorily implement the action across the system.

#### **Phase 5 – Consolidation and Continuation**

Phase 5 can be considered the “final phase” of the ECA process. However, reaching and completing Phase 5 should not be considered the end of the culture change process. In the Consolidation and Continuation phase, all completed action plans are incorporated into “day to day” operations at Pan Am (i.e., communication, training, tracking, record keeping, etc.). Permanent processes and revised/new roles and responsibilities will be introduced to all Pan Am employees and management.

It is recommended that Pan Am perform a reassessment of the environmental culture at a set frequency (i.e., one year to the date of completion of Phase 2) to determine the current status and to develop new areas of focus/action plans for continual improvement of the culture within the organization.